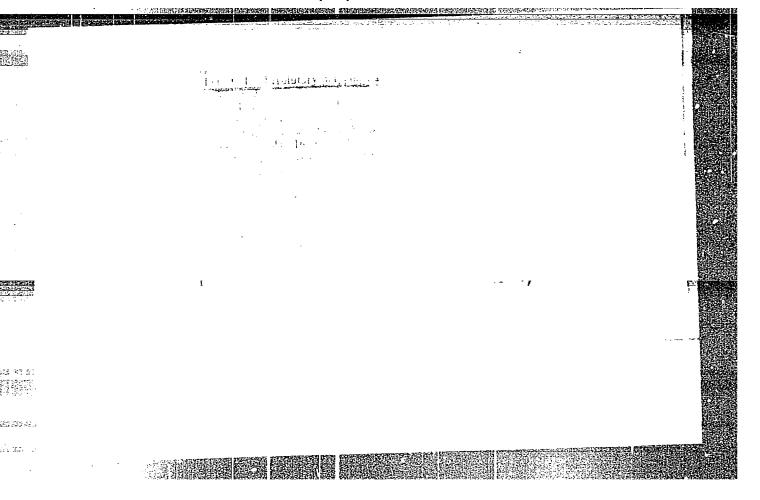


A. I. FIST, USSR/Math. - Topology Card 1/1 Fet, A. I. luthor Generalization of the "Lusternik-Shnirel man" Theorem on the covering of spheres and of some other theorems connected with Mtle the former. Doki AN SSSR, 95, 6, 1149 - 1151, 21 Apr 1954 Periodical : The article analyses the Lusternik-Shnirel man theorem on the covering of spheres where the reflection condition, in respect to Abstract the centers, is changed into an arbitrary condition for involute reflection of spheres upon themselves. Some other theorems related to the one just mentioned are also considered. V. A. Steklov, Math. Institute of the Acad. of Scs. of the USSR Institution: 25 Feb 1954 Submitted

	A STEWNSON OF THE PARTY OF THE	ne Ne
FET, A. I.		
Call Nr: AF Transactions of the Third All-union Mathematical Congress (Jun-Jul '56, Trudy '56, V. 1, Sect. Rpts., Izdatel'stvo AN SSSR, Moscow, There are 11 references, all of them USSR.	Cont. Moscow,	
Likhtenbaum, L. M. (Moscow). Characteristic Numbers of Improper Graph.	135-136	
Smirnov, Yu. M. (Moscow). On the Extension of Topological Spaces.	136	
Smirnov, Yu. M. (Moscow). On Metrisation of Local Compact Spaces Which are Decomposable into the Sum of Countable Number of Sets With Countable Bases.	136-137	
Mention is made of Aleksandrov, P. S. and Uryson, P. S.		
Fet, A. I. (Novosibirsk). Calculus of Variations in the	137	
Mention is made of Lyusternik, L. A., Shnirel'man, Shvarts, A. S., Al'ber, S. I. and Pontryagin, L. S. Card 44/80		

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R000412920015-7"



SUBJECT

USSR/MATHEMATICS/Functional analysis CARD 1/2 PG - 475

AUTHOR TITLE

FET A.I.

The space of analytic functions and its application to the

Cauchy-Kowalevski problem.

PERIODICAL

Uspechi mat. Nauk 11, 2, 215-222 (1956)

reviewed 1/1957

The author shows that the class A of functions being uniformly convergent in the unit circle, can be changed in a K-space (see Kantorovič "functional analysis") such that a corresponding convergence inside of the unit circle is identical with the uniform convergence. This permits the application of general function-theoretical schemes for the theorem of S. Kowalevski too. The author proves that the problem

(1)
$$\frac{\partial u_i}{\partial t} = \sum_{j=1}^{N} \sum_{k=1}^{n} a_{ij}^{(k)} \frac{\partial u_j}{\partial x_k} + \sum_{j=1}^{N} b_{ij}^{u_j} + c_i$$

$$u_{i}(0,x_{1},...,x_{n}) = 0$$
 (i=1,...,x)

 (a_{ij}^k, b_{ij}, c_i) are analytic functions of the real variable $t, x_1, \dots x_n$ in $|t| < a, |x_i| < a$ (i=1,...,n)) can be solved by successive approximations as

Uspechi mat. Nauk 11, 2, 215-222 (1956)

CARD 2/2

PG - 475

follows: Let $u_i^{(0)}$ be an arbitrary system in the neighborhood of the zero point of analytic functions; let the functions $u_i^{(1)}$ (i=1,...,N; l=1,2...) be defined by

 $u_{i}^{(1+1)} = \int_{0}^{t} \left\{ \sum_{j=1}^{N} \sum_{k=1}^{n} a_{ij}^{(k)} \frac{\partial u_{j}^{(1)}}{\partial x_{k}} + \sum_{j=1}^{N} b_{ij} u_{j}^{(1)} + c_{i} \right\} dt \quad (1=0,1,2,..).$

Then there exists a neighborhood $|t| \le b_1$, $|x_k| \le b_1$ in which for $l \longrightarrow \infty$ the $u_i^{(1)}$ converge uniformly to the analytic functions u_i . The functions u_i form the single solution of (1) in the region of analytic functions. Furthermore it is asserted that (1) is correct in the K-space, i.e. from the convergence of the initial function there follows the convergence of the solutions.

FET, A.I.

SUBJECT

USSR/MATHEMATICS/Theory of functions

CARD 1/2

AUTHOR

FET A.I., BODREZOVA L.B.

TITLE PERIODICAL Functions with simple niveau lines.

Mat. Sbornik, n. Ser. 38, 303-318 (1956)

reviewed 12/1956

In the plane domain C let be defined a real function F(p) = F(x,y). The function can assume finite and infinite values and be continuous (from $p_n \longrightarrow p_o$ there follows $F(p_n) \longrightarrow F(p_o)$). The set F_c of all points of G in which F(p) = c is called the set with niveau c of the function F(p). The point p* is an ordinary point of F(p) if p* possesses an arbitrarily small neighborhood which from all sets with niveau c is cut in a simple arc (or is cut not at all). Else p* is critical. If all critical points are isolated, then the function is called simple. The authors prove that in the neighborhood of each point p a simple function by corresponding homeomorphisms can be transferred into one of the following functions:

F = x if p is an ordinary point;

(m>1) if p is a saddle point (i.e. critical point but no $F = R(x+iy)^m$ extremum);

 $F = \pm (x^2 + y^2)$ if p is a point of the relative maximum or minimum;

 $F = \pm \ln(x^2 + y^2)$ if p is a pole $(F(p) = \pm \infty)$.

Mat. Sbornik, n. Ser. 38, 303-318 (1956)

CARD 2/2

PG - 443

Demanding that F possesses no points of relative extremum, then one obtains the class of the pseudo-harmonic functions. It shall be remarked that an infinitely often differentiable function must not be "simple" in the authors' sense. For the proof of their theorems the authors use conformal mappings and results as well as notions of Suvorov (Mat. Sbornik, n. Ser. 33, 73-100 (1953); Uspechi mat. Nauk 11, 3, (1956)).

INSTITUTION: Novosibirsk.

20-6-10/59

AUTHOR TITLE FET, A.I.

The Absolute Minimum in a Two-Dimensional Parametric Problem on a Manifoldness (Absolutnyy minimum v dvumernoy parametric eneskoy zadache na mnogoobrazii. - Russian)

Cheskoy zadache na mnogoobrazii. - Russian)

Doklady Akademii Nauk SSSR 1957, Vol 113, Nr 6, pp 1224-1226

PERIODICAL

ABSTRACT

First of all reference is made to some relevant preliminary papers. The author of the paper under review then proves the existence of an absolute minimum for an arbitrary positively regular problem on the manifoldnesses M of the Morrey type. The compact manifoldnesses the solution is obtained without for the compact manifoldnesses the noncompact manifoldnesses any metrical restrictions; for the noncompact manifoldnesses are introduced in the infinite. If M corresponding conditions are introduced in the infinite. If M corresponding conditions are introduced in the results found here is a Euclidio space, then we obtain from the results found here theorem by Sigalov, and in the case of the Plateau problem the theorem by Sigalov, and in the case of the Plateau problem we obtain the Morrey theorem. In the paper under review, the author employs the method devised by A.G. Sigalov instead of author employs the method devised by A.G. Sigalov instead of author employs the method devised by A.G. Sigalov instead of author employs the method devised by A.G. Sigalov instead of author employs the method devised by A.G. Sigalov instead of author employs the method devised by A.G. Sigalov instead of author employs the method devised by A.G. Sigalov instead of author employs the method devised by A.G. Sigalov instead of author employs the method devised by A.G. Sigalov instead of author employs the method devised by A.G. Sigalov instead of author employs the method devised by A.G. Sigalov instead of author employs the method devised by A.G. Sigalov instead of author employs the method devised by A.G. Sigalov instead of author employs the method devised by A.G. Sigalov instead of author employs the method devised by A.G. Sigalov instead of author employs the method devised by A.G. Sigalov instead of author employed in the context in the method in the case of the province of the method in the case of the solution is obtained to the context in the context in the context in the case of the context in the context in the context in th

CARD 1/3

20-6-10/59

The Absolute Minimum in a Two-Dimensional Parametric Problem on a Manifoldness.

tend towards minimum prerequisites on the smoothness of M.

Let M be a differentiable manifoldness, the local coordinates of which are connected by means of the transformations of which are connected by means of the transformations $y^1 = y^1(x^1, \dots, x^n)$ (i = 1,2,...,n). In this context, the first derivations of the yi of the Lipschitz condition are sufficient. (Manifoldness of the smoothness C_1^i). On M the metric tensor (Manifoldness of the smoothness C_1^i). On M the function metrics is defined. Now let there be defined on M the function E_1^i be given. The concept of the unambiguous regularity of such metrics is defined. Now let there be defined on M the function E_1^i be given. The point p and of the simple bivector E_1^i in the following way: E_1^i coordinate representation. F is written in the following way: E_1^i coordinate representation. F is written in the following way: E_1^i coordinate representation in this form also in the Russian text/. In this context,

 $A^{ij} = \begin{bmatrix} a^i & a^j \\ b^i & b^j \end{bmatrix}$ (i $\neq j$) are the components of \mathcal{L}_p .

Some conditions are given for F, and then several concepts are defined.

CARD 2/3

CIA-RDP86-00513R000412920015-7 "APPROVED FOR RELEASE: 08/23/2000

20-6-10/59

The Absolute Minimum in a Two-Dimensional Parametric Problem

on a Manifoldness.

Then the main theorem of the paper under review is given with the corresponding lemmata. (No reproduction)

ASSOCIATION:

Electrotechnical Institute for Telecommunications Novosibirsk.

PRESENTED BY:

P.S. Aleksandrov, Member of the Academy, 27.11. 1956

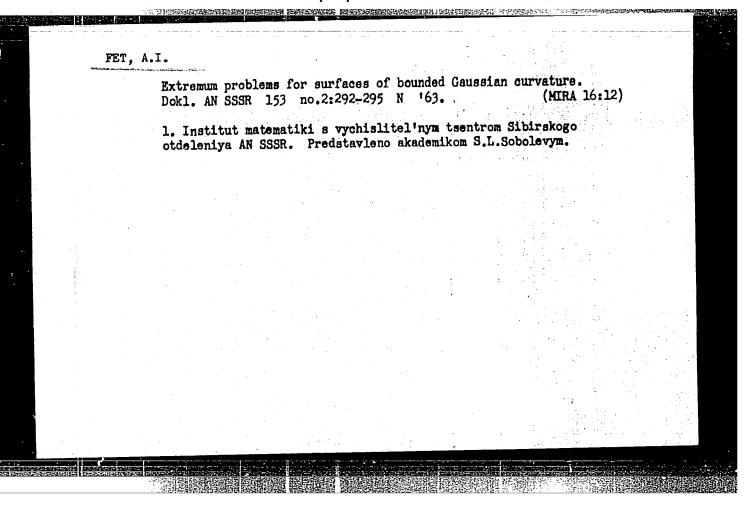
SUBMITTED:

16.11. 1956

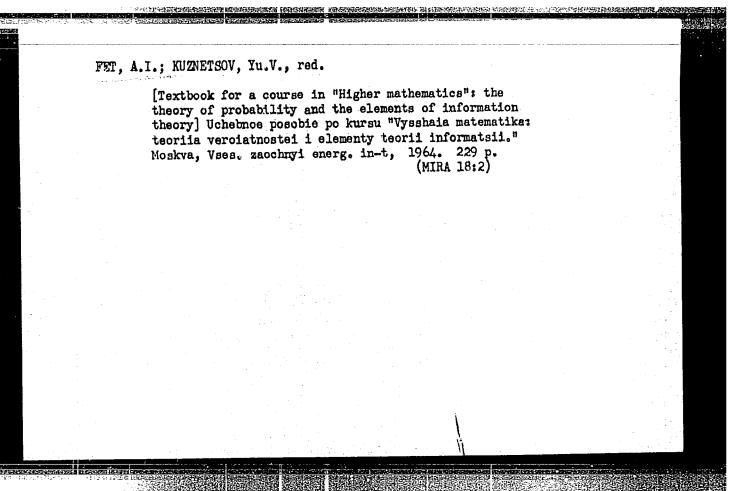
AVAILABLE:

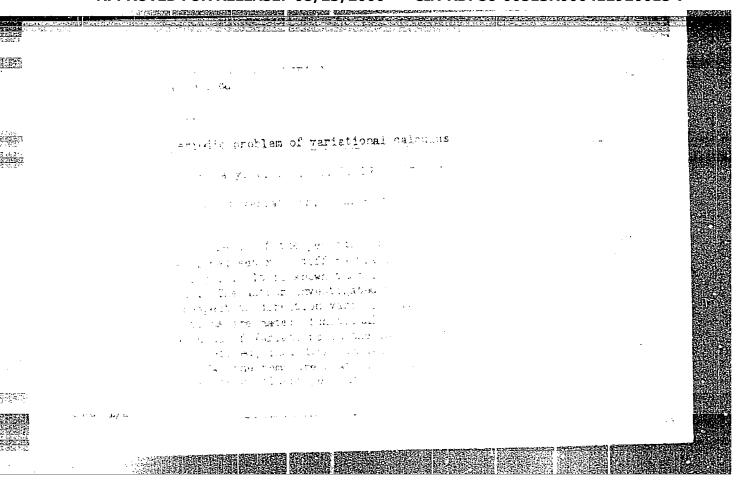
Library of Congress.

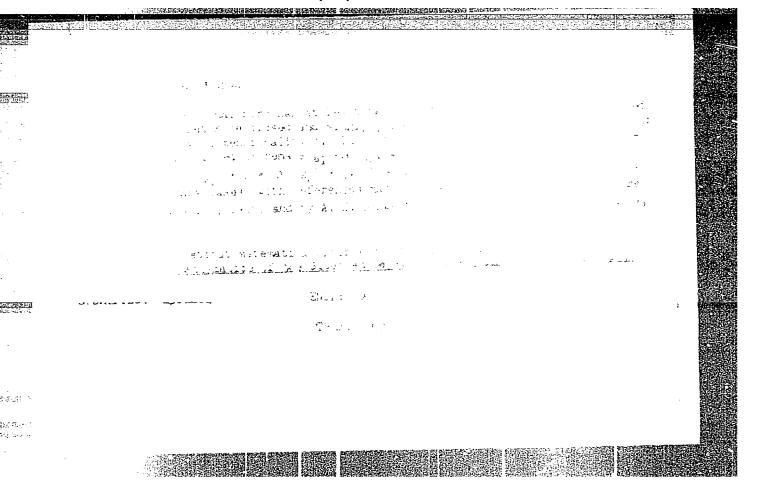
DARD 3/3

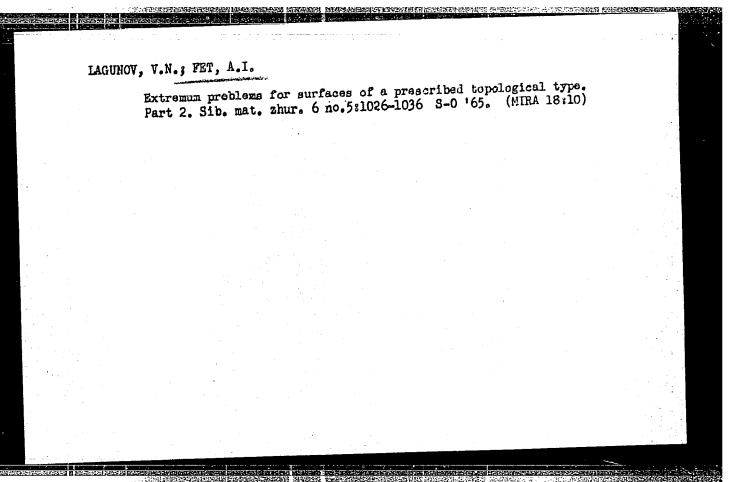


FET, A.I. Stability theorems for nearly spherical convex surfaces. Dokl. AN SSSR 153 no.3:537-539 N '63. (MIRA 17:1) 1. Institut matematiki s vychislitel'nym tsentrom Sibirskogo otdeleniya AN SSSR. Predstavleno akademikom S.L. Sobolevym.









I. 05273-67 EWT(d)/EWP(l) IJP(c) BB/GG

ACC NR: AR6023997

SOURCE CODE: UR/0372/66/000/003/G042/G042

AUTHOR: Ilovayskiy, V. S.; Lozovskiy, V. S.; Fet, Ya. I.

40

TITLE: Use of address language to automate the synthesis of digital computers #__(

C

SOURCE: Ref. zh. Kibernetika, Abs. 3G315

REF SOURCE: Sb. Vychisl. sistemy. Vyp. 18. Novosibirsk, 1965, 34-71

TOPIC TAGS: computer language, memory address, algorithm, digital computer

ABSTRACT: One of the possible methods of automating the synthesis of the symbolic circuit of digital computers on the basis of a specified system of instructions is considered. An algorithm (A) for transition from the recording of computer instructions in the address language to a symbolic circuit in the form of a system of logic equations is proposed. The starting premise for constructing A is the condition of the performance of all the instructions by a single device. A applies to the construction of the symbolic circuits of computers for which the following starting characteristics are specified: number of memory elements, capacity of each memory element and method of access; method of presentation of numbers, format of numbers; addressability; method of presentation of modified instructions; system

Card 1/2

UDC: 62-506:681.142:621.3.001.1:51

I 05273-67					
ACC NR. AR6023997					0
of instructions; princ expressed in conditio of an elementary com	onal units. The operaputational system.	ation of A is il	lustrated by de	scribing the sy	nthesis
Yu. U. [Translation of	of abstract]				
arm ann an 1	gang special page from a special speci	:			
SUB CODE: 05, 09/				•	
		•			
		4 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -			
				•	
		Page 1			
				**	
Card 2/2 egh			•		
					1.0

EWI(d)/EWP(1) IJP(c) SOURCE CODE: UR/0372/66/000/003/G042/G042 1, 05274-67 ACC NR. AR6023998 AUTHOR: Fet, Ya. I. TITLE: Certain algorithms for digital computer design 11,0 SOURCE: Ref. zh. Kibernetika, Abs. 3G316 REF SOURCE: Sb. Vychisl. sistemy. Vyp. 18. Novosibirsk, 1965, 72-91 TOPIC TAGS: algorithm, computer design, circuit design, digital computer ABSTRACT: The possibilities of using digital computers to automate the conversion from the symbolic circuit to the schematic diagram (SD) during computer designane considered. An algorithm for the logic simulation of symbolic circuit is described, and the block diagram of a program is presented. Algorithms allowing, on the basis of a system of logic equations, the construction of SD for transistor-diode elements of a specific type are described. SD are constructed for the case where: the combination network is realized through superpositions of 2-stage circuits; each logic element is represented by a set of m coincidence circuits with n conditions; the functions of these elements and their inversions are produced at the logic--element outputs; along with each input variable there exists its inversion; the load capacity UDC: 62-506:681.142:621.3.001.1:51 Card 1/2

of the sources of the input variables is unrestricted. 9 illustrations. Bibliography of 9 tit Translation of abstract]	
SUB CODE: 09/	
"我们,我们就是一个人,我们就是一个人,我们就是我们的,我们就是一个人,我们就是一个人,我们就是一个人,我们就是一个人,我们就是一个人,我们就是一个人,我们就是	
	•
	1
Card 2/2 egh	

IJP(c) 1. 14.287-66 SOURCE CODE: UR/0413/66/000/006/0075/0075 ACC NR: AP6011235 INVENTOR: Kolesnikov, G. S.; Rodionova, Ye. F.; Levin, B. B.; ORG: none TITLE: Method of obtaining phosphorus-containing copolymers. Class 39, No. 179922 / SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 6, 1966, 75 TOPIC TAGS: copolymer, copolymerization, styrene, organic phosphorus compound ABSTRACT: An Author Certificate has been issued for a method of obtaining phosphorus-containing copolymers by copolymerization of styrene with unsaturated organophosphorus compounds in block or solution at temperatures of 50 to 120C in the presence of a dinitrile azoizobutyric acid as the initiator. To increase the variety of unsaturated organophosphorus compounds, α -phenyvinylphosphinic acid is used as the initiator. SUB CODE: 11/07/SUBM DATE: 18Jun63/ HDC: 678.85: 678.746.22.547.341

	I. 44188-66 EWT(m)/EWF(J)/T IJF(c) WW/RM	
	ACC NRI AP6013276 SOURCE CODE: UR/0413/66/000/008/0078/0078	
-	INVENTOR: Rogovin, Z. A.; Tyuganova, M. A.; Zharova, T. Ya.; Levin, B. B.; Fetin, I. N.	
	ORG: none	
	TITLE: Preparation of graft copolymers of cellulose and phosphorus-containing	
_	monomers. Class 39, No. 180792	
	SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 8, 1966,	
	78	
	TOPIC TAGS: copolymer, graft copolymer, monomer, cellulose, primary anomatic	
	ABSTRACT: This Author Certificate introduces a method for obtaining graft	
	copolymers of cellulose and phosphorus-containing monomers by introducing aromatic	
	amines into the cellulose molecule and subsequently converting them to diazo groups.	
	. 1/2 UDC: 677, 46:678, 029 65: 66 095 834 66 095 2	
	Card 1/2 UDC: 677.46:678029.65:66.095.834 66.095.2	
TENES.		

ACC NR: AP	6013276 he variety of acid is sugg	heat-re	sistant a	and ion-e	change r	nateria g mono	ls, α- mer.	phenyl [*] [L	'D]	
phospninic	actu in page	-							•	
CITE CODE	: 11,07 SUBM	DATE:	27Feb6	5/		•				
20B CODE	• •/- ,		*							
				•					*	
		*								
									4.	
•								•		
		•								
1		-					•			-
										-
			, -							
	aum									

FET, Ya.1.

AID P - 4532

Subject

: USSR/Electronics

card 1/2

Pub. 90 - 5/10

Authors

: Simontov, I. M. and Ya. I. Fet

Title

Evaluation of selective properties of resonant systems

Periodical

Radiotekhnika, 2, 54-59, F 1956

Abstract

The author discusses a method of evaluating the selective properties of resonant systems. The method is based on a comparison of the relative power of oscillations of the error spectrum with the relative power of oscillations of the useful spectrum. The author introduces and defines, a concept of the "coefficient of rectangularity" as one of the criteria of selectivity. He presents a comparative evaluation of some resonant systems and states that the use of other criteria leads to erroneous conclusions. Four diagrams, 2 tables, 5

Soviet references (1939-1951).

AID P - 4532

Radiotekhnika, 2, 54-59, F 1956

Card 2/2 Pub. 90 - 5/10

Institution: None

Submitted : F 12, 1955

J_00365-66 EWT(d)/T/EED-2/EWP(1) IJP(c) BB/gg ACCESSION NR: AP5021615 UR/0286/65/000/013/0092/0092 AUTHORS: Kantorovich, L. V., Fet, Ya. I. TITLE: Computer system consisting of a general purpose digital computer and ab small computer. Class 42, No. 172567 SOURCE: Eyulleten! izobreteniy i tovarnykh znakov, no. 13, 1965, 92 TOPIC TAGS: computer system, digital computer ABSTRACT: This Author Certificate presents a computer system consisting of a general purpose digital computer and a small digital computer. The small computer contains a high speed arithmetic device with an operational memory unit with small capusity of trigger registers, a control microprogram unit, and a semiconstant memory unit for the normal program. To increase the effective response rate of this system by supplying a significant portion of the operations to the small computer, to broaden the class of problem solvable by the system by dividing the functions between the general purpose and small machines, and to utilize in the system any general purpose machine without significant changes in its design, the commund decoder output of the general purpose machine is connected through a matching device to the unit input of the blocking trigger whose zero output is Card 1/3

L 00365-66 ACCESSION HR. APSOZI615

connected through a matching device to the crole pulse gate of the general purpose machine. The commend decoder output is connected through a matching device to the first input of a gate whose second input is connected to the zero output of a trigger-distributor. The output of this gate is connected to the first inputs of the beginning address gates of the argument block in the operational mesony mit of the general purpose machine, to the first inputs of the beginning address gates of the normal embyrogram in the semiconstant memory unit of the small machine; tend to the first inputs of the cycle number index gates of the normal subprogram. The second injute of the index gates are connected through a matching device to the digit autists of the address portion of the consend register of the general purpose mething. The butputs of these gains are connected respectively to the one inputs of the address register triggers of the operational memory unit of the general purpose machine. The outputs of these triggers are connected through a matching: device to the address code shaper of the general purpose machine and to the one inputs of the command address register triggers of the small machine. The outputs of these triggers are connected to the address decoder of the semiconstant semony unit of the small machine and to the one inputs of the opole counter triggers of the normal subprogram. The counter output is connected to the zero inputs of the trigger-distributor and blocking trigger. The outputs of the code shapers of the general purpose machine are connected through a matching device to the first inputs general purpose machine are connected through a matching device to the first inputs of a group of number somission gates whose ascend inputs are connected to the 2/3

I. 00365-66 ACCESSION NR: APSOR1615 output of the control microprogram device and whose outputs are connected to the inputs of the arithmetic device registers of the small machine. The outputs of the arithmetic device registers are connected to the first inputs of a group of number distribution gates whose second inputs are connected to the output of the control microprogram device and whose outputs are connected through a matching device to the code shaper inputs of the general purpose machine. The output of the cycle generation of the small machine is connected to the first input of gate whose second input is connected to the one input of a synchronizing trigger and whose output is connected to the first input of a cycle pulse collecting circuit. The output of the cycle generator of the general purpose machine is connected through a matching device to the first input of a gate whose second input is connected to the zero output of the synchronizing trigger and whose output is connected to the second input of the cycle pulse collecting circuit. The inputs of the synchronizing trigger are connected to the outputs of the control microprogram device. The output of the cycle pulse collecting circuit is connected to the input of the microcommand counter of the small machine. ASSOCIATION: Institut matematiki, SO AN SSSR (Institute of Mathematics, SO AN SSSR) SUB CODE: DP SUBMITTED. Card 3/3

ACC NR: AP7001438

(M,N)

SOURCE CODE: UR/0413/66/000/021/0159/0159

INVENTORS: Kantorovich, L. V.; Fet, Ya. I.; Ilovayskiy, I. V.

ORG: none

TITLE: Summator for simultaneous addition of several binary terms. Class 42, No. 188151 / announced by Institute of Mathematics, Siberian Division AN SSSR (Institut matematiki Sibirskogo otdeleniya AN SSSR)

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 21, 1966, 159

TOPIC TAGS: adder, binary number, coincidence circuit

ABSTRACT: This Author Certificate presents a summator for simultaneous addition of several binary terms with storage of the transfers and accumulation of the results, consisting of single-digit triple-input summators. To increase the response rate, the outputs of the combination circuits of each of the single-type p-digit units of the summator are connected through coincidence circuits digit by digit to the inputs of the intermediate result storage register of the given unit. The outputs of the digit groups of the intermediate result storage register are connected through coincidence circuits and auxiliary storage units digit by digit to the inputs of the corresponding digits of each unit of the summator. The outputs of the new term registers are connected digit by digit to the free inputs of the summator units. To generate the total sum in normal form with minimal additional equipment cost, the

Cord 1/2

UDC: 681.142.07

ACC NR: AP7001438

lowest output channels of the combination circuit of each unit are connected digit by digit through coincidence circuits to the inputs of the intermediate result storage register of the given unit. The following output channels of the combination circuit of each unit are connected digit by digit through coincidence circuits to the inputs of the intermediate result storage register of the given unit and also to the inputs of the first group of coincidence circuits of the highest unit. The outputs of the corresponding digits of the new term registers are connected to the first inputs of the second group of coincidence circuits of each summator unit. The outputs of the first and second groups of coincidence circuits are connected to the inputs of the corresponding accumulation circuits whose outputs are connected to the free inputs of the corresponding digits of the following highest unit. A storing summation signal is fed to the second inputs of the second groups of coincidence circuits of all units. An assimilation signal is fed to the second inputs of the first groups of coincidence circuits of all units. To increase the response rate, the outputs of the combination circuit of each unit are connected through the first group of coincidence circuits to the inputs of the first intermediate result storage register of the given unit and through the second group of coincidence circuits to the inputs of the second intermediate result storage register of the given unit. The outputs of the first register are connected through the third group of coincidence circuits to the first inputs of the accumulation circuits. The outputs of the second register are connected through the fourth group of coincidence circuits to the second inputs of the accumulation circuits. The inputs of the accumulation circuits are connected digit by digit to the corresponding inputs of the given and following summator units. SUB CODE: 09/ SUBM DATE: 15Mar65 Card 2/2

PETCU, C., Dr.; CHERASE, C., chimist; DUMBRAVA, E., sora.

Renal function in epidemic hepatitis. Med. int., Bucur.

4 no.8:1162-1167 Dec 56.

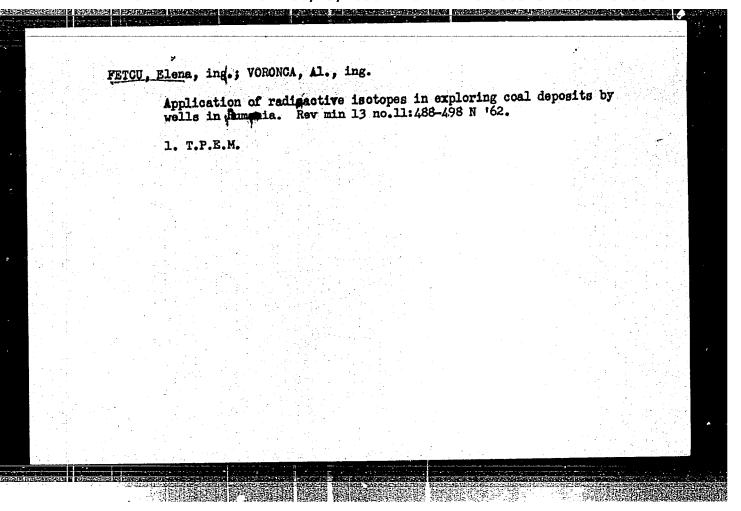
1. Lucrare efectuata in Spitalul de stat -- Orasul Stalin.

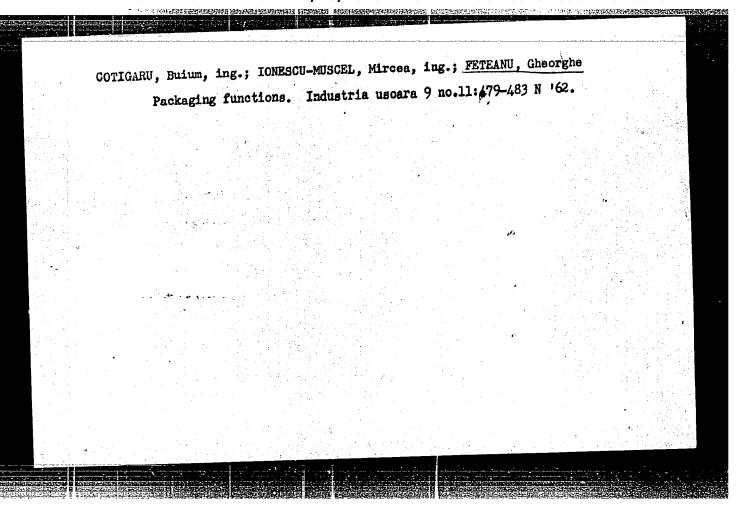
(HEPATITIS, IMPECTIOUS, physiol.

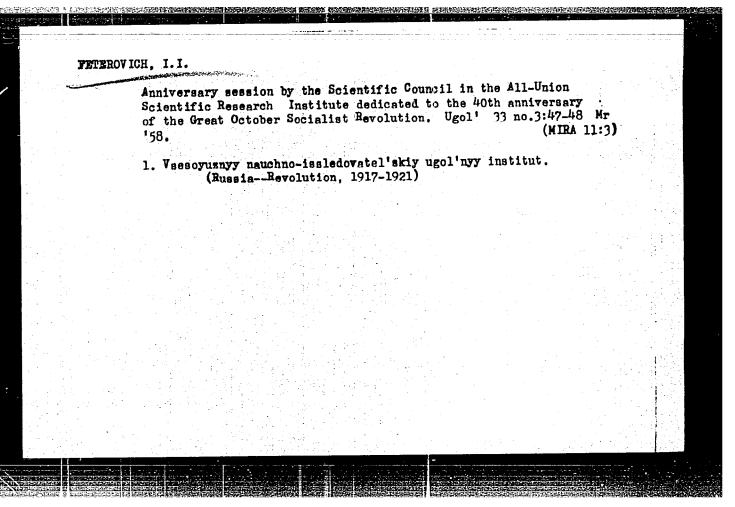
kidney funct. tests)

(KIDMET FUNCTION TESTS, in various dis.

hepatitis, infect.)





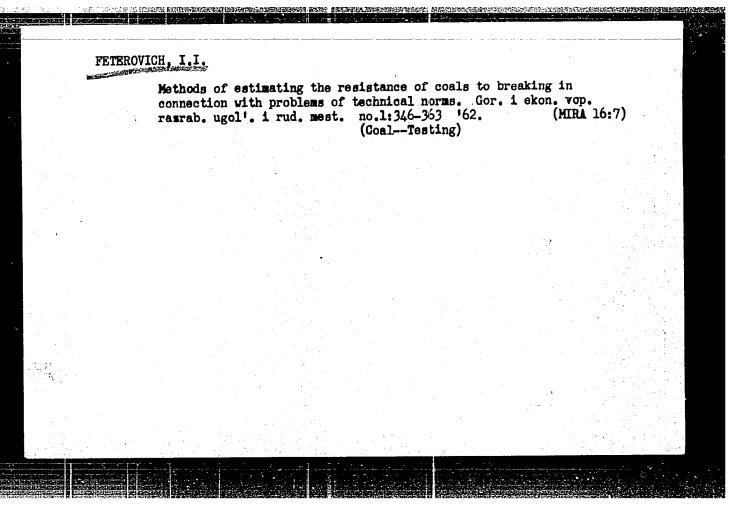


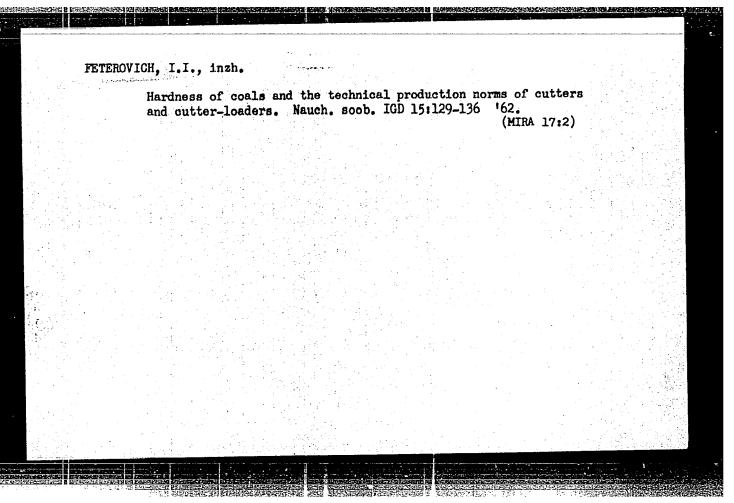
BUCHNEV, Valer'yan Konstantinovich, prof., doktor tekhn. nauk,
 [deceased]; ERONNIKOV, Dmitriy Mikhaylovich, doktor tekhn.
 nauk; VASIL'CHIKOV, Nikolay Vasil'yovich, kand. tekhn. nauk;
 GANZEN, Georgiy Aleksandrovich; SHUSTOV, Nikolay Vasil'yevich;
 FETEROVICH, Izrail' Izraylavich, inzh.; DENIDYUK, G.P., otv.
 red.; BURTSEV, L.I., otv. red.; KOROLEVA, T.I., red. izd-va;
 OSVEXENKO, V.G., tekhn. red.; FROZOROVSKAYA, V.L., tekhn. red.

[Handbook on drilling boreholes in underground workings] Spravochnik po bureniiu shpurov i skvazhin na podzemnykh rabotakh.

[By] V.K.Buchnev, i dr. Moskva, Gosgortekhizdat, 1962. 271 p.
 (Boring)

(MIRA 15:12)





KAMINSKIY, I.N., kand. ekonom. nauk; LABKOVSKIY, B.Ye., kand. ekonom.
nauk; FETEROVICH, I.I., kand. tekhn. nauk; PINSKIY, S.Ye.,
insh.; TYURKINA, N.I., inzh.; KHODOS, G.I., inzh.; KHELEMENDIK,
V.G., inzh.; LERNER, Yu.I., inzh.

Problem of a standard structure of management, standard
staffs, and norms on the number of engineers, technicians
and employees in cral mines. Ugol' 40 no.8:60-65 Ag '65.

(MIRA 18:8)

1. Institut gornogo dela im. A.A. Skochinskogo (for all except
Khodos, Khelemendik, Lerner). 2. Donetskiy nauchno-issledovatel'skiy ugol'nyy institut (for Khodos, Khelemendik). 3. Gosudarstvennyy institut po proyektirovaniyu shakht v yuzhnykh rayonakh
SSSR (for Lerner).

EFF(c)/EWP(j)/EWT(m) Pc-4/Pr-4 RM BOOK STATE OF STATE O TOFIC TAGE: ester, phosphinic acid, alkylphosphinic acid, alkylene ukide, thenylvinylphosphinic acid ADSTRACT: This Author Certificate presents a method for obtaining phosphinic acid enters by interacting warmed alkylphosphinic acids with alkylene oxides. To broaden the assortment of the esters, alkylphosphinic acids are replaced by Q-phenylvinylphosphinic soid. An alternate process may be conducted at 120-1350. ANSOCTATION: Organizatsiya gosudarstvennogo komiteta khimicheskoy promyshlennosti 10:1 gosplene SSSR (Enterprise of the State Committee of the Chemical Industry at the Cosplan SSSR) ENCL: 00 SUB CODE: OC ENTEMITTED: 30Sep63 IN) REF SOV: 000 Card 1/1708 OTHER: 000

LO11-66 EWT(m)/EPF(c)/E	WP(j)/T/STC(m) RPL WW	/IEN /0286/65/000/015/0080/0081	
MOROGION MAIL MESOCADSS	' ሥ ^ታ	UR/0286/65/000/015/0080/0081	
			X
TITLE: Method for obtaining	ng grafted copolymers. Cl	Lass 39, No. 173407 8	
BOURCE: Byulleten' izobre	eniy i tovernykh znekov,	n>. 15, 1965, 80-81.	
and the control of t	マルマクラ かいこうさんだい けんしんりゅう けいい かいとう	는 보이는 문에 마음에 사이가 있는 말이 되고 있다면 그 하는데 다른 그리고 있다면 전 원통은 함께서 1위하다	THE WAY
	tificate presents a method	l for obtaining grafted copoly-	
ABSTRACT: This Author Cerimers by copolymerization of in bulk at high temperature obtain fire resistant copolymerization is carried	tificate presents a method vinyl monomers with poly in the presence of perolymers having ion exchange tout in the presence of Commike-teknologicheskiy i		
ABSTRACT: This Author Certains by copolymerization of in bulk at high temperature obtain fire resistant copol copolymerization is carried ASSOCIATION: Moskovskiy ki	tificate presents a method vinyl monomers with poly in the presence of perolymers having ion exchange tout in the presence of Commike-teknologicheskiy i	i for obtaining grafted copoly- murs or copolymers of <-olefin exide or azo-initiators. To properties, the process of copingly in the process of phenylvinylphosphinic acid.	
ABSTRACT: This Author Cerimers by copolymerization of in bulk at high temperature obtain fire resistant copol copolymerization is carried ASSOCIATION: Moskovskiy ki Moscow Chemical Engineerin	tificate presents a method vinyl monomers with poly is in the presence of perolymers having ion exchange tout in the presence of continuous con	i for obtaining grafted copoly- murs or copolymers of <-olefin oxide or azo-initiators. To properties, the process of	

그들은 이 얼마는 이 그 마다랑까지 하셨습니다.		·/*
	상이 있는 경우 사람이 되었다. 그는 사람들은 사람들이 되었다. 그는 사람들이 되었다. 그는 사람들이 되었다. 그는 사람들이 되었다. 사람들이 살아보고 있다면 보다 하는 것이 되었다. 그는 사람들이 되었다.	
L 3554-66 EWI (m)/EPF(c)/E	EWP(j)/I/ETC(m) RPL WW/RM	444
ACCESSION NR. APSOZIJIOO	UR/0286/65/000/015/0081/0081	
AUTHORS: Levin B. B.: Ko	ilesnikov, G. S.; Rodionova, Ye. F.; Fetin, I. N. 37	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	ning copolymers of vinylpyrrolidone (vinylpyridine).	
Class 39, No. 173408		
	eniy i tovarnykh znakov, no. 15, 1965, 81	
Sours: Barreran, Isoolac	ASILY A government and the second sec	
TOPIC TAGS: copolymer, vir	nylpyridine, monomer, copolymerization	
		3.5
ARSTRACT: This Author Cert	cificate presents a method for obtaining copyrisms of	
vinvlovrroldone (vinvlovrid	ificate presents a method for obtaining copolymers of line) with a vinyl monomer by copolymerizing appropriate	
vinylpyrroldone (vinylpyrid	iine) with a vinyl monomer by copolymerizing appropriate a solution at the temperature of 50-1000 in the presence	
vinylpyrroldone (vinylpyrid monomers in a block or in a	iine) with a vinyl monomer by copolymerizing appropriate a solution at the temperature of 50-1000 in the presence of itiator. To increase the heat and fire resistance of	
vinylpyrroldone (vinylpyrid monomers in a block or in a	iine) with a vinyl monomer by copolymerizing appropriate a solution at the temperature of 50-1000 in the presence	
vinylpyrroldone (vinylpyrid monomers in a block or in a of azoisooleic dinitrile in the polymer, color: block or in a of azoisooleic dinitrile in the polymer, w-phenylvinyl ASSOCIATION: none	ine) with a vinyl monomer by copolymerizing appropriate a solution at the temperature of 50-1000 in the presence nitiator. To increase the heat and fire resistance of the lead is used as vinyl monomer.	
vinylpyrroldone (vinylpyrid monomers in a block or in a of azoisooleic dinitrile in the polymer, <pre></pre>	iine) with a vinyl monomer by copolymerizing appropriate a solution at the temperature of 50-1000 in the presence of itiator. To increase the heat and fire resistance of	
vinylpyrroldone (vinylpyrid monomers in a block or in a of azoisooleic dinitrile in the polymer, -phenylvinyl ASSOCIATION: none SUBMITTED: 11Nov63	ine) with a vinyl monomer by copolymerizing appropriate a solution at the temperature of 50-1000 in the presence nitiator. To increase the heat and fire resistance of the lead is used as vinyl monomer.	
vinylpyrroldone (vinylpyrid monomers in a block or in a of azoisooleic dinitrile in the polymer, -phenylvinyl ASSOCIATION: none SUBMITTED: 11Nov63	ine) with a vinyl monomer by copolymerizing appropriate a solution at the temperature of 50-1000 in the presence nitiator. To increase the heat and fire resistance of lphosphinic acid is used as vinyl monomer. ENCL: 00 SUB CODE: 00, &C	
vinylpyrroldone (vinylpyrid monomers in a block or in a of azoisooleic dinitrile in the polymer, -phenylvinyl ASSOCIATION: none SUBMITTED: 11Nov63	ine) with a vinyl monomer by copolymerizing appropriate a solution at the temperature of 50-1000 in the presence nitiator. To increase the heat and fire resistance of lphosphinic acid is used as vinyl monomer. ENCL: 00 SUB CODE: 00, &C	

(A)	<u>I 11138-66</u> E	WT (m)/EWP(j)/T/ETC	(m) RPL WW/I		47/0047	
	44 55	44/ 55 Kolesnikov, G. S.	94 5	5 44 55	6	
ORG: none				1.44.55	الرا المنافقة	
TITLE: P	reparation of a	crylic or methacry	lic acid copolyn	mers. Class 39,	No. 176682	
SOURCE:	yulleten' izob	reteniy i tovarnyk	h znakov, no. 23	3, 1965, 47		
	s: copolymer,	acrylic acid, meth	acrylic acid, he	eat resistant ma	terial,	
copolymers bulk or so nitrile.	of acrylic or olution copolym To improve the	tificate has been methacrylic acid erization at 50—1 heat—and fire-rene vinyl monomer.	with vinyl monor .00C in the prese	mers. The metho ence of azobisis	d involves obutyro-	
SUB CODE:	07. 11/ SUBP	DATE: 17Ju163/	ATD PRESS: 4	173		
(DP)						
Cerd 1/1		UDC	678.744.322.1	3		
ing a property of the control of the						

1 24704-66 EWT(m)/EWP(1)/ ACC NR: AP6009535 (A) SOURCE CODE.	UR/0#13/66/000/00	5/0070/0070 Ele
INVENTOR: Levin, B.	B. Fevin, 1. W.		B.
ORG: none		musscantaining homo	polymer.
TITLE: Method for ob		表示: 10.40 42f 新月15 4 f 新加。15 日本15 月 17 日本15 日本15 日本15 日本15 日本15 日本15 日本15 日本15	ニート・トゥー にもく さいがく トーマー・カラ かんがんの (重要な)の
SOURCE: Izobreteniya	되고 말이 얼굴하죠. 그 보다 나는 사람들은 모든 나를 보지 않았다.	· 数1 章 (1) (1) (1 数数3.5 章 (1) (1) (1) (1) (1) (1) (1) (1)	[14] · · · · · · · · · · · · · · · · · · ·
ropic TAGS: phosphor homopolymer	유가 맞는 그 사람들이 가게 되는데 뭐 먹는다.		
ABSTRACT: An Author for obtaining a phosp block polymerization the melting point of containing heat-resi	of an unsaturated a monomer. To ex	acid at temperatur	es exceeding
used as the unsatura			
SUB CODE: 11,07/	SUBM DATE:		2
Card 1/1 FW	UDC: 678.7	46.87	
	والمتناكات المحمد المحمد		

ACC NO. APO	EWT(m)/EWP(j)		E CODE: UR/O4	•	71	
		; Levin, B. B.; Rod		zewsteen.	5	
SOURCE: I	obreteniya, prom	phorus-containing p nyshlennyye obraztsy	, tovarnyye zr	naki, no. 4, 1	966, 69	
		phorus containing po		n method of D	reparing	
1 1 1 10 1111	_^^\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	ficate has been issumers by initiated control of the broaden the variety inic acid is suggest		AATITMAYA TILL	INCIDED ACT	
phosphorus phosphorus of alpha-p	_^^\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	broaden the variety inic acid is suggest		AATITMAYA TILL	INCIDED ACT	
phosphorus phosphorus of alpha-p	compounds. To l henylvinylphosph	broaden the variety inic acid is suggest		AATITMAYA TILL	INCIDED ACT	
phosphorus phosphorus of alpha-p	compounds. To l henylvinylphosph	broaden the variety inic acid is suggest	of phosphorus ted as the pho	polymers, the	INCIDED ACT	

AKOPYAN, A.A., kand.tekhn.nauk; FETIN, V.P., kand.tekhn.nauk; YAROSHENKO,
A.I., inzh.

Combination dischargers for 500 kv. networks and their test results.
Elek.sta. 33 no.2:54-59 F '62. (MTRA 15:3)

(Electric power distribution)(Electric protection)

211880

s/109/61/006/007/020/020 D262/D306

24.7900

Fetina, V.N.

TITLE:

AUTHOR:

Ferro-resonance even-harmonics generation

PERIODICAL: Radiotekhnika i elektronika, v. 6, no. 7, 1961,

1207, 1208

TEXT: It is suggested that the reason for the presence of an even harmonic in a practical electrical circuit is due to the hysteresis character of the magnetization curve. It is stated that no clear physical interpretation of the mechanism of generation of higher even harmonics exists in literature. It is stated that the results of the author's experiments permit a few remarks to be made as to this mechanism. The harmonics have to be assumed as unstable which also should be true for a hysteresis symmetrical characteristic of a real non-linear element. On the other hand, when this symmetry is affected by one reason or another, an even harmonic of the current appears in the cct and it resonates. The symme-

Card 1/4

APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R000412920015-7"

24880 S/109/61/006/007/020/020

Ferro-resonance even-harmonics ...

try may be destroyed e.g. because of the distortions present in the sinewave applied to the cct. As a result, the similarity between the ascending and descending branch of the magnetization curve is destroyed and the second harmonic starts to resonate at a certain amplitude of external source. In observing this, phenomenal curves of Fig. 1 may be obtained. The region of 2nd harmonic generation and its resonant value are as expected from the above reasoning. If the assymetry of the loop is compensated by introducing small constant shifts or by applying a signal with less distortions, the generation for the same conditions does not occur. It appears again, however, at large amplitudes of external source, the amplitude of the 2 ω component becomes quite large with random initial phase. It seems, therefore, as if the stability of even higher harmonics in this case were due to the destruction of the symmetry of a hysteresis loop by transient processes. A second possible reason for stability may be the presence in the cct with a ferromagnetic core, of a variable equivalent loss resistance which at frequencies below ω_{res} increases linearly with the magne-

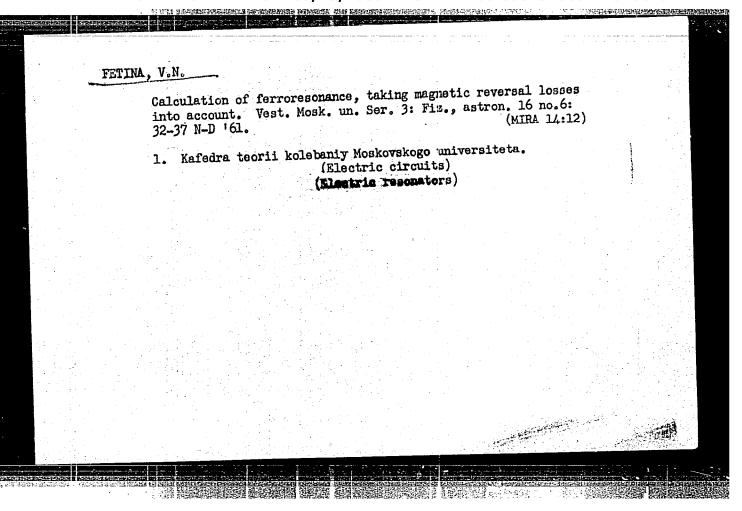
Card 2/4

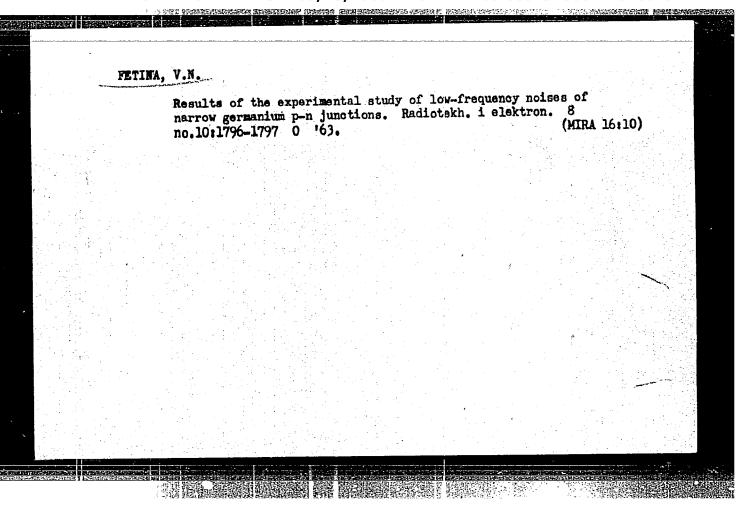
2h880
S/109/61/006/007/020/020
Ferro-resonance even-harmonics ... D262/D306

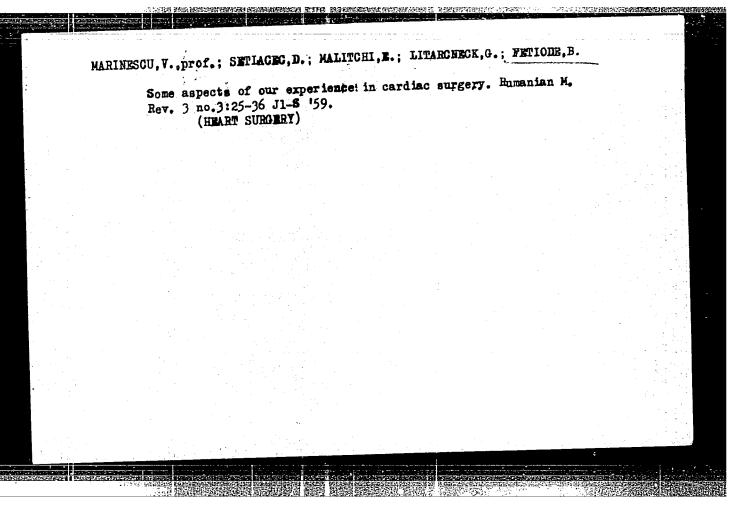
tizing field. It is stated in conclusion that the above ideas are tentative only and require further study. There are 2 figures and 6 references: 5 Soviet-bloc and 1 non-Soviet-bloc.

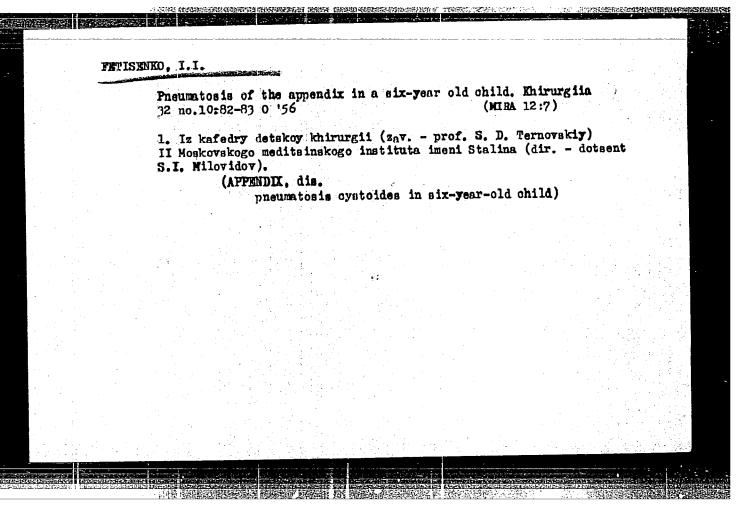
ASSOCIATION: Fizicheskiy fakul'tet Moskovskogo gosudarstvennogo universiteta im. M.V. Lomonosova, kafedra teorii kolebaniy(Moscow State University im. M.V. Lomonosov, Faculty of Physics, Department of Theory of Oscillations)

SUBMITTED: March 9, 1961

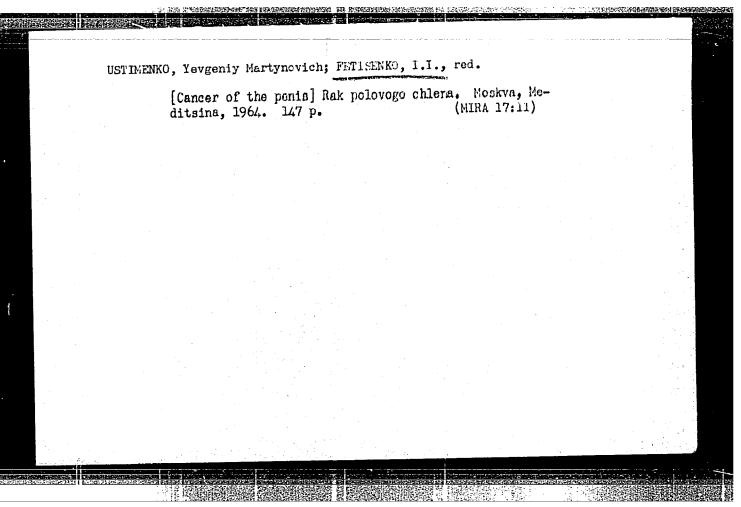








APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R000412920015-7"



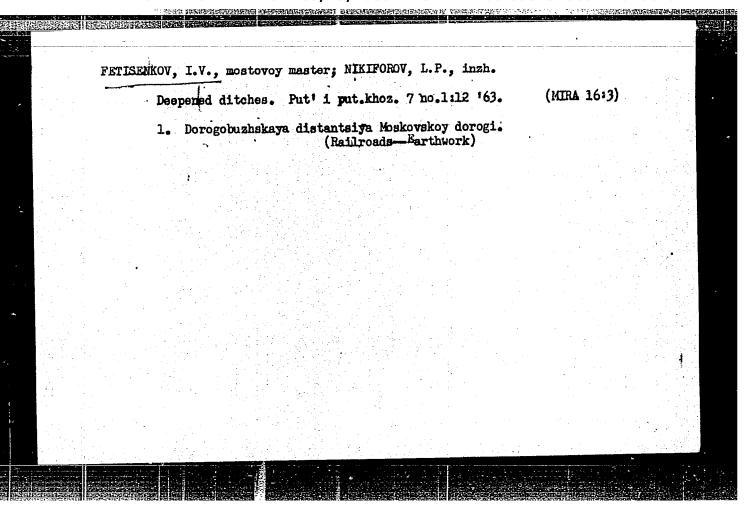
KUBIKOV, V.F.; FETISENKOV, I.V.

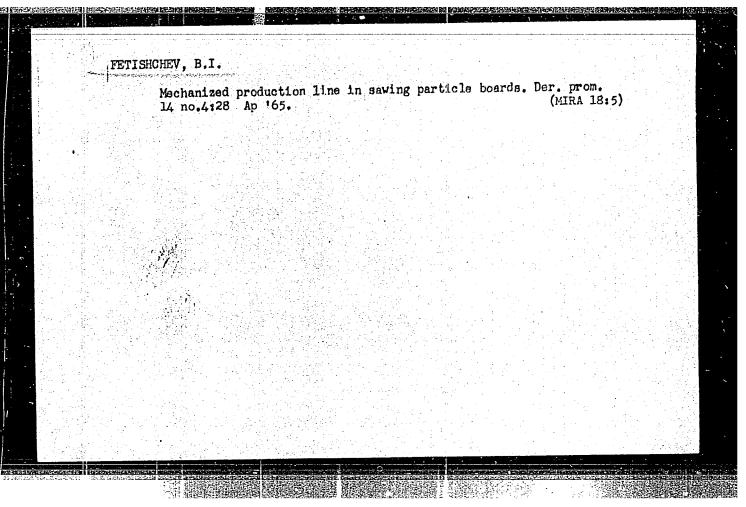
Reconversion of temporary railroad bridges. Put' i put.khoz. 5 no.4:28 Ap '61. (MIRA 14:7)

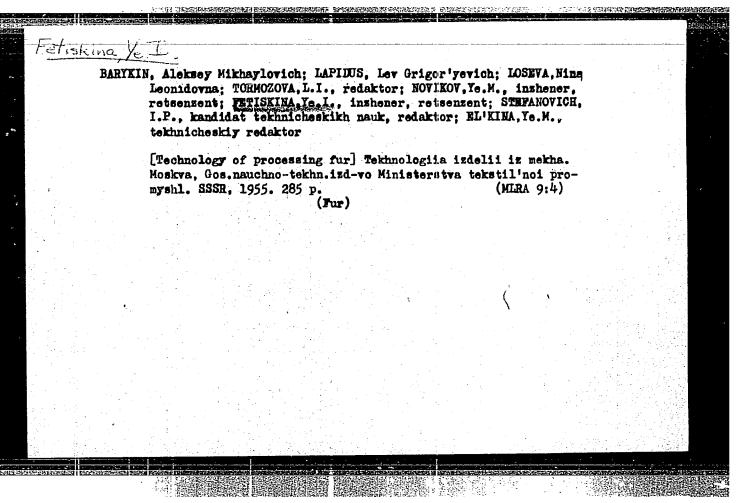
1. Nachal'nik Dorogobuzhskoy distantsii Kalininskoy dorogi (for Kubikov). 2. Mostovoy master, st. Dorogobuzh, Kalininskoy dorogi (for Fetisenkov).

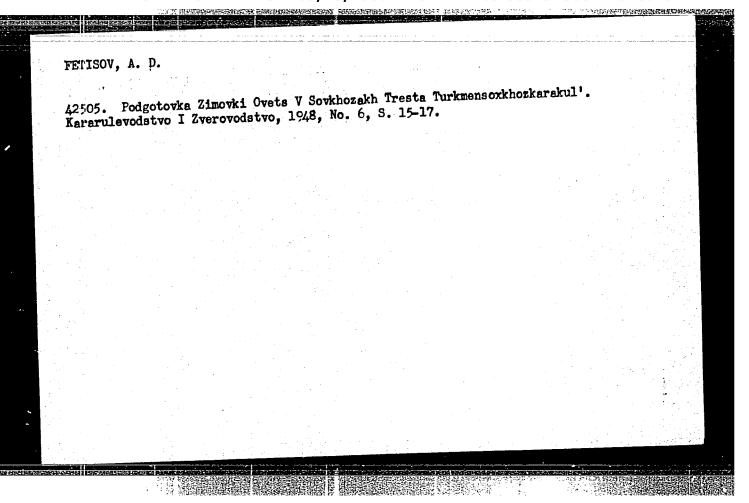
(Railroad bridges)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R000412920015-7"









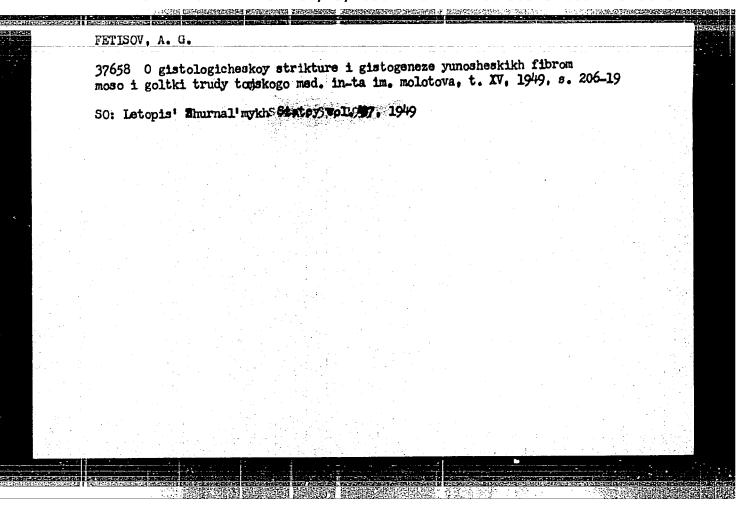
raTible, A. d.

Fetisov, A. G. "The scientific creative road of Professor Andrey Gregor'yevich Savinykh" (Surgeon, On the 30th anniversary of his medical and public activity), Sbornik trudov, posvyashch. prof. Savinykh, Tomsk, 1948, p. 7-11.

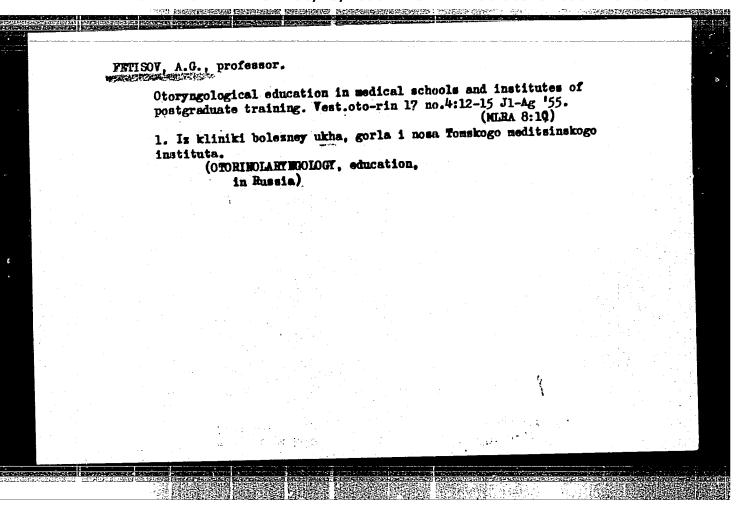
So: U-3261, 10 April 1953 (Letopis 'Zhurnal 'nykh Statey, No. 12, 1949).

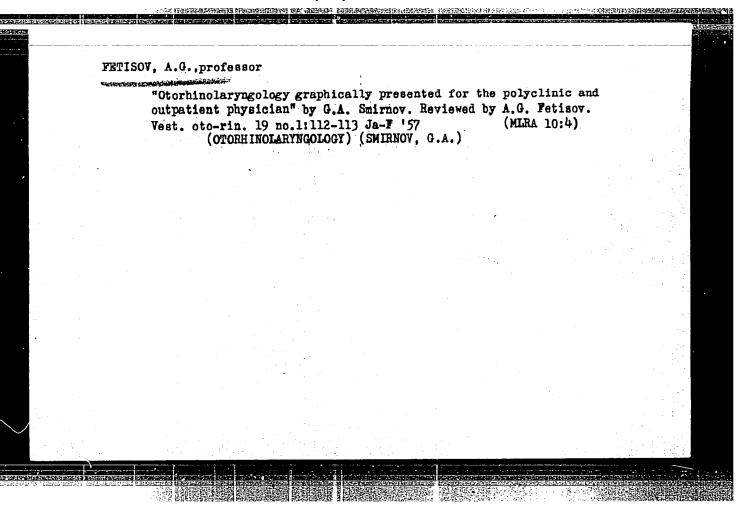
Figure 1. G.

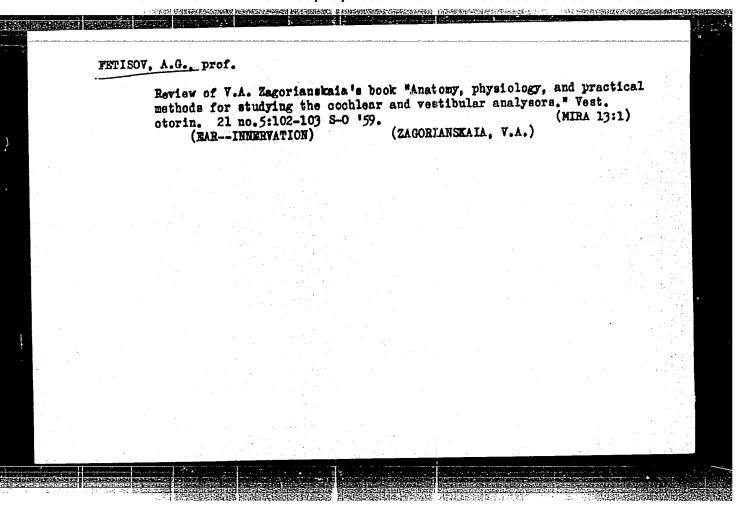
Fi



	E
FETISCV, A. G.	
4. Respiratory Organs - Diseases	#
7. "Diseases of the upper respiratory tract and of the ear". D. I. Zimont. Reviewed	
by A. Fetisov. Vest. oto-rin., 14, No. 2 1952.	
9. Monthly List of Russian Accessions. Library of Congress, June 1952. Unclassified	•





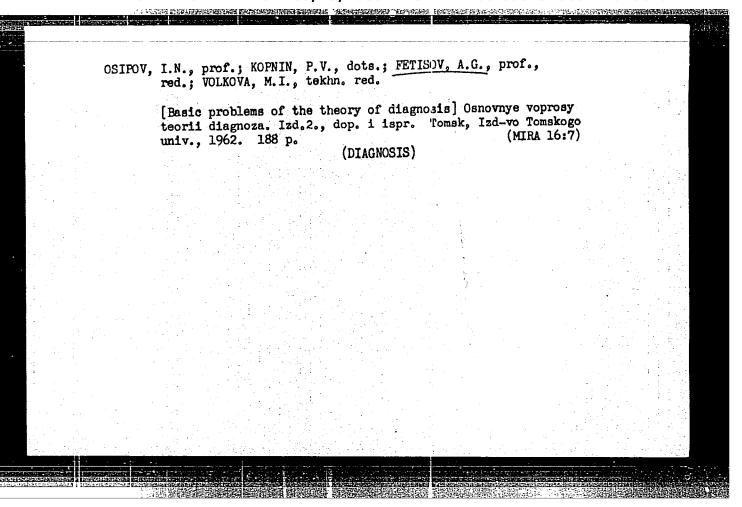


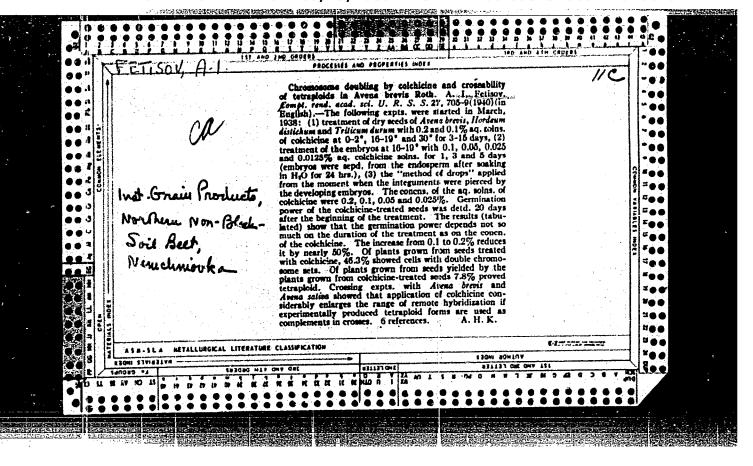
GOL'DBERG, D.I., prof., otv. red.; ZIVERT, K.N., prof., red.; MASYUKOVA, Ye.M., dots., red.; VETISOV, A.G., prof., red.; SHUBIN, N.V., dots., red.; OSOYSKIY, A.T., tekhn. red.

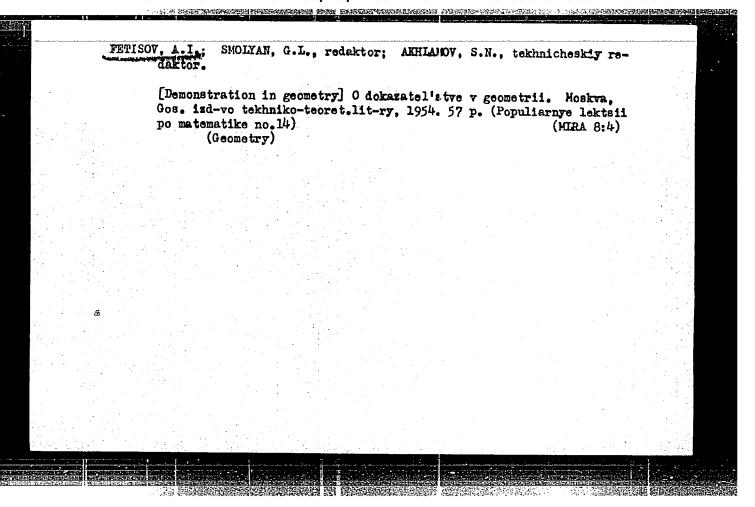
[Problems in surgery of the esophagus and stomach. Biological effect of rays from the 25 Mev. betatron] Voprosy khirurgii pishchevoda i zheludka. Biologicheskoe detstrie luchei betatrona 25 MEV. Tomsk, Izd.vo Tomskogo univ., 1960. 354 p.

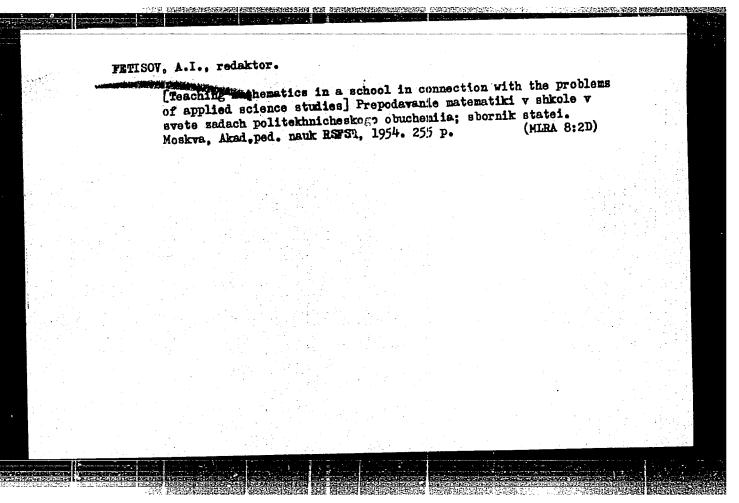
1. Tomsk. Tomskiy gosudarstvennyy meditsinskiy institut.

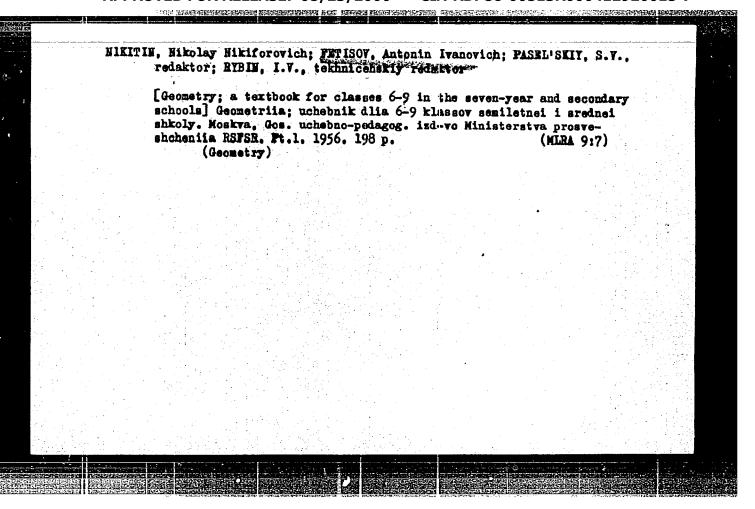
(ALIMENTARY CANAL—SURGERY) (RADIATION—PHYSIOLOGICAL EFFECT)

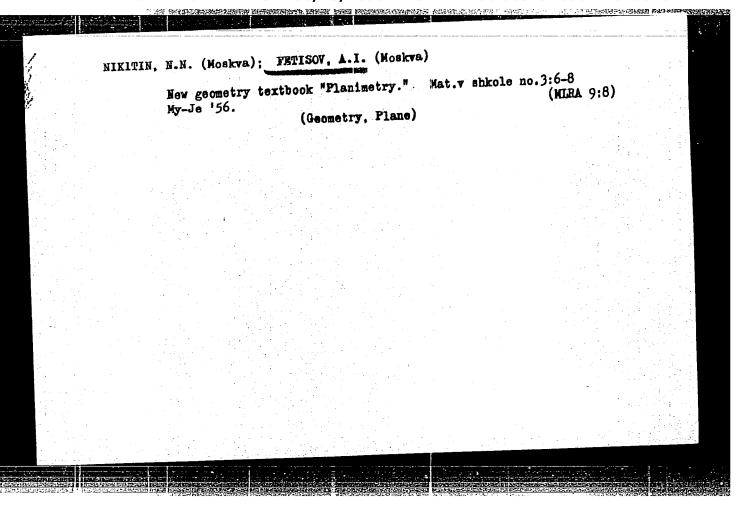


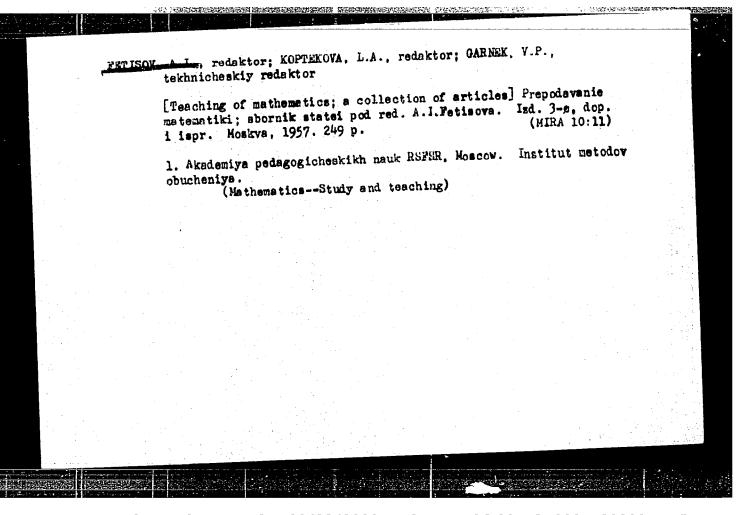








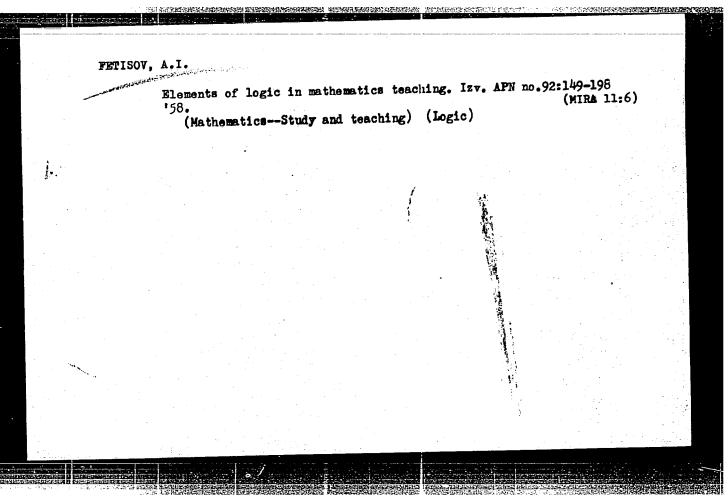


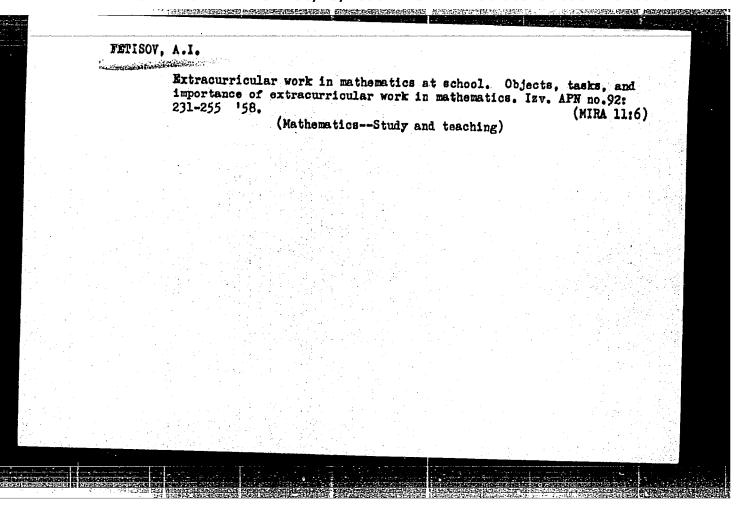


NIKITIN, Nikolay, Nikiforovich; FETISOV, Antonin Lyanovich; PAZEL'SKIY, S.V., red.; KAPUSTINA, V.S., red.; SMIRNOVA, M.I., tekhn.red.

[Concise practical instructions to accompony the new textbook of geometry (Part 1) by N.N.Nikitin and Fetisov; a menual for teacheral Kratkie metodicheskie ukasaniia k novomu uchebniku geometrii (chast' 1); posobie dlia uchitelei. Izd. 2-oe, perer. Moskva, Gos. uchebno-pedagog. izd-vo M-va prosv. RSFKR, 1957. 72 p. (MIRA 11:4)

(Geometry-Study and teaching)





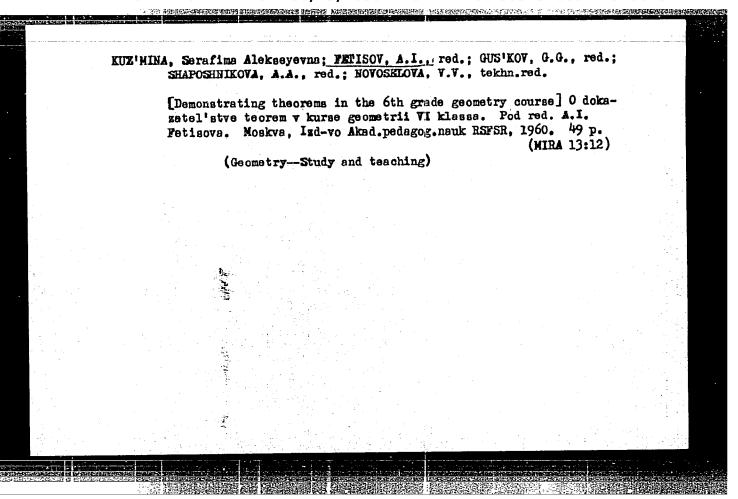
ASHKINUZE, V.G., nauchnyy sotrudnik; OIBSH, I.A., nauchnyy sotrudnik;

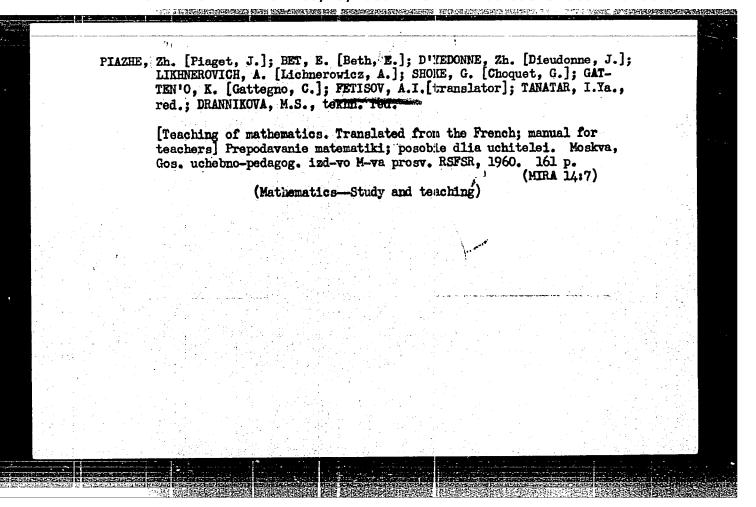
MASLOVA, G.G., nauchnyy sotrudnik; MESEKOV, K.I., nauchnyy
sotrudnik; NIKITIN, M.N., nauchnyy sotrudnik; SEMUSHIN, A.D.,
nauchnyy sotrudnik; FETISOV, A.I., nauchnyy sotrudnik; KOSTELOVSKIY, V.A., red.; TARASOVA, V.V., tekhn.red.

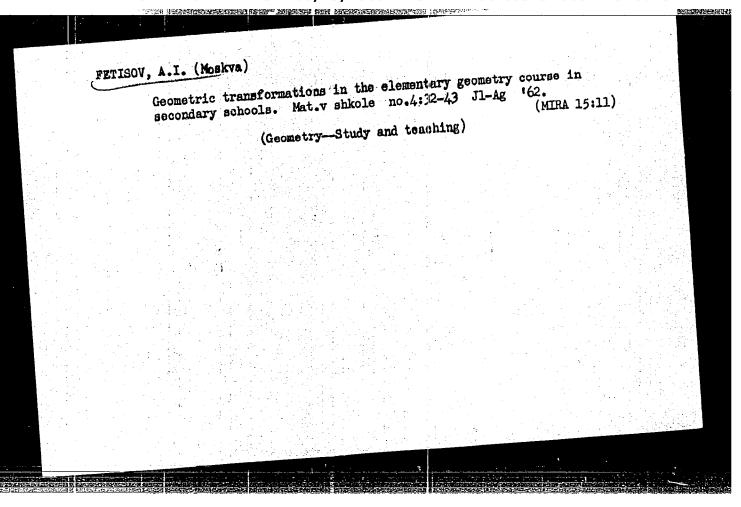
[Teaching mathematics in schools in the 1959/60 school year]
0 prepodavanii matematiki v shkole v 1959/60 uchebnom godu. Pod
red. A.D.Semushina. Moskva, 1959. 135 p. (MIRA 13:5)

1. Akademiya pedagogicheskikh nauk RSMSR, Moscow. Institut metodov
obucheniya. 2. Soktor metodiki prepodavaniya matematiki Instituta
metodov obucheniya Akademii pedagogicheskikh nauk RSMSR (for all
except Kostelovskiy, Tarasova).

(Mathematics—Study and teaching)







17(2,13)

SOV/177-58-11-34/50

AUTHORS:

Fetisov, A.V., Lieutenant-Colonel of the Medical Corps,

and Michnik, M. Ya.

TITLE:

The Affection of the Nervous System in Influenza

PERIODICAL:

Voyenno-meditsinskiy zhurnal, 1958, Nr 11, p 84

(USSR)

ABSTRACT:

In summer 1957, the authors observed 3 patients suffering from the toxic form of influenza with pronounced phenomena of an affection of the central nervous system. Based on the results obtained. the authors conclude that the pronounced symptoms of the affection of the nervous system resulted from. reactive changes of the cerebrum due to influenza intoxication. A long lasting adynamia, general asthenia and vegetative dystonia were the result of steady functional disturbances of vegetative formations of the cerebrum, as well as of the reduction of the biological tonus of the cells of the cortical

and subcortical centers.

Card 1/1

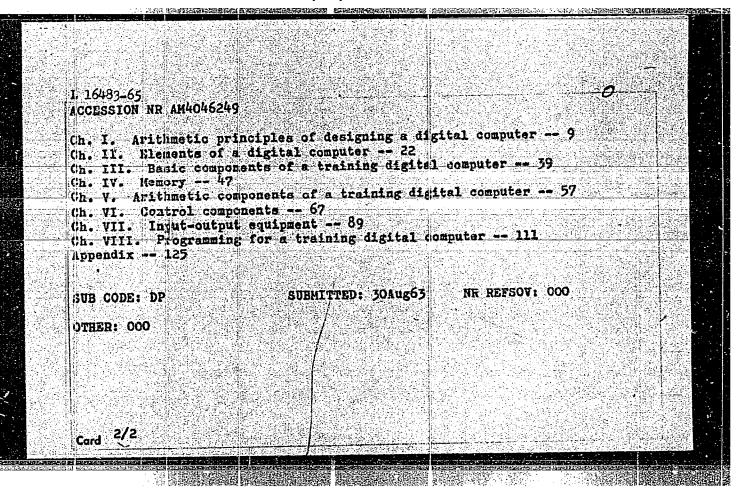
CIA-RDP86-00513R000412920015-7" **APPROVED FOR RELEASE: 08/23/2000**

MATOV, Viktor Ivanovich; NIKOLAYEV, Oleg Aleksandrovich; ZHDAKOVICH,
Nikolay Semenovich; FETISOV, Aleksandr Vasil'yeyich;
StOL'NIKOV, N.Ya., red.; BORUNOV, N.I., tekhn. red.

[Digital computer for shoulked use] Utchbaia tsifrovaia vychislitel'naia mashina. Moskva, Gosenergoizdat, 1963. 127 p.
(Biblioteka po avtomatike, no.84) (MIRA 16:12)

(Electronic digital computers)

AFWL/ASD(a)-5/AFMD(p)/AFETR	/EWP(1)	?(c)/ESD(dp)/SSD/
ACCESSION NR AM4046249		s/
Hatov, Viktor Ivanovich; Vasil'yevich; Zhdanovi	Mikolayev, Oleg Aleksandrovich;	Fetisov, Aleksande
Digital training computer Moscow, Gosenergoizdat	(Uchebnaya teifrovaya vy*chisl , 1963, 127 p. illus., 24,000 ca po avtomatike, vy*p. 84	itel'naya mashina). copies printed.
TOPIC TAGS: digital compu	iter	
1 computars describes	s book cites the basic principle the principal and functional ci scribes a computer designed by	the authors. The
	de audience of workers concerne	q with bloorems or
book is intended for a widigital computer technological	gy and can serve as a text for	
book is intended for a wi	ogy and can serve as a text for sputers.	



ETISOV, D.V.

AUTHOR: Fetisov, D.V. and Milyutin, V.I.

109-4-14/20

TITLE:

Asymmetry of the Optical System of an Electrostatic Microscope and its Resolving Power. (Asimmetriya opticheskoy sistemy elektrostaticheskogo mikroskopa i yego razreshayushchaya sposobnost)

PERIODICAL: Radiotekhnika i Elektronika, 1957, Vol.2, No.4, pp. 488 - 493 (USSR)

ABSTRACT: An experimental investigation of the effect of the asymmetry of a lens and of the asymmetry of a system of lenses on the resolving power of an electrostatic microscope is described. The experiments were carried out on the Soviet-made microscope, type JCM-50, which was specially adapted for the investigation; this instrument was described by the author in an earlier work (see instrument was described lens consisted of three diaphragms; Ref. 4). The investigated lens consisted of three diaphragms; the middle diaphragm could easily be removed and its axial position could be changed with respect to the remaining diaphragms. The resolving power of the microscope was first measured as a function of the radial asymmetry (ellipticity) of the aperture of the middle diaphragm. The asymmetry was defined as the difference A a between the maximum and the minimum diameters of the aperture. It was found that for Δa up to 4 μ , the Card 1/2 resolving power δ is constant and equal to about 60 Δa :

CIA-RDP86-00513R000412920015-7" APPROVED FOR RELEASE: 08/23/2000

Asymmetry of the Optical System of an Electrostatic Microscope and its Resolving Power.

 Δ a between 4 and 14 μ 5 is proportional to Δ a and at 14 μ it is equal to about 100 Å. It was also found that 5 is a linear function of the axial asymmetry of the middle diaphragm and that of the upper diaphragm. In order to achieve 5 of about 60 Å, it was found necessary to preserve the axial symmetry of the upper diaphragm to within 5% and that of the middle diaphragm to 0.4%. In a two-lens system, the axial asymmetry of the projection lens for δ = 60 Å could be of the order of 1.0 mm, while in a three-lens microscope the asymmetry of the centre lens had to be less than 0.15 mm. There are 6 figures (3 experimental graphs) and 5 references, of which 2 are Slavic.

SUBMITTED: June 9, 1956.

AVAILABLE: Library of Congress.

Card 2/2

FETISOV, D. V.

109-5-17/22

AUTHOR TITLE

PERIODICAL

ABSTRACT

FETISOV, D.V., MILYUTIN, V.I.

Adjustment of an Electrostatic Microscope

(K yustirovke elektrostaticheskogo mikroskopa. Russian)

(K yustirovke elektrostaticheskogo mikroskopa. Russian)

Radiotekhnika i Elektronika, 1957, Vol 2, Nr 5, pp 653 - 658(U.S.S.R.)

With reference to the work of the author in the last issue (Radiotekhnika i Elektronika 1957, Vol 2, Nr 4, pp 488 - 493) he investigates in this work the single stages of the adjustment of an optical system of a microscope. 1.) The centering of the electrodes of electrostatic lenses. It is most purposeful to center outside the microscope calumn, the centers of the lens-electrode apertures are fixed to the rotation axis of the lens body by means of an optical microscope. He then describes the method developed by A.G. ZAVRAZHIN, for obtaining a rotation of the lens body. 2.) Adjustment of the microscope lenses. It is most useful to displace the first projection lens (intermediary lens). First the illumination system with the rigidly fixed objective and the second projection lens is adjusted while the intermediary lens is switched off. Then follows the intermediary lens and the axis of the electron bundle is introduced. 3.) Adjustment of the illumination system of the microscope. The variety where the cathode and the illumination system are displaced as a whole is the most useful of the four mentioned. 4.) The adjustment of the microscope as a whole.

Card 1/2

109-5-17/22

Adjustment of an Electrostatic Microscope

Here a method is recommended which is based on the change of the field-tension of the objective. This method was tried with the microscope ESM-60 and showed that the control of the adjustment as well as the adjustment itself can be carried out during operation of the microscope without any disturbing effect. It is sufficient if for this purpose an additional graduator with a discharger, or a special slab are introduced into the scheme. (With 8 illustrations and 1 Slavic reference).

ASSOCIATION FRESENTD BY SUBMITTED AVAILABLE Not given

9.6.1956

Library of Congress

Card 2/2

SOV/120-58-5-20/32

AUTHORS: Sbitnikova, I.S., Dubinina, Ye.M., Spivak, G.V., Fetisov, D.V.

TITLE: An Attachment to the EEM-75 Emission Electron Microscope for the Visualisation of Surfaces, Using Secondary Electron Emission (Pristavka k emissionnomu elektronnomu mikroskopu EEM-75 dlya vizualizatsii poverkhnostey pri pomoshchi vtorichnoy elektronnoy emissii)

PERIODICAL: Pribory i tekhnika eksperimenta, 1958, Nr 5, pp 78-82 and 2 plates (USSR)

ABSTRACT: A description is given of an attachment to the EEM-75 microscope. Using secondary and thermionic emission, both the micro-geometry and the emission pattern of thermal cathodes may be visualised. This means that it is possible to compare the distribution of centres of electron emission with micro-geometry of active thermal cathodes. The surface of thermal cathodes is irradiated by an electron beam from an electron gun which directs the beam at an angle to the surface. The angle between the optical axes of the electron gun and the microscope may be varied between 85 and 45°. This

Card 1/3

SOV/120-58-5-20/32

An Attachment to the EEM-75 Emission Electron Microscope for the Visualisation of Surfaces, Using Secondary Electron Emission

adjustment may be used to choose the best conditions of irradiation corresponding to the best contrast of the image for different depths within the surface microstructure. A sectional drawing through the entire instrument is shown in Fig.1, in which 1 is the electron gun, 2 is a mechanism for adjusting the angle of the irradiation by the primary beam, 3, 4, are centering devices for the beam, 5 is a table for illuminating diaphragms, 6, 7 are observation windows, 8 is a bellows, 9 is a mechanism for adjusting the angle, 10 is the base, 11 is the cathode, 12 is the focusing electrode, 13 is the anode, 14 is the anode cap, and 15 is a ceramic insulator. The results obtained with this attachment are shown in Figs.3-7. Fig.3 shows the image of an oxide cathode with secondary (a) and thermionic (b) emission. A similar pair of images of an L-cathode is shown in Fig.4 while Fig.5 shows an image of

Card 2/3

SOV/120-58-5-20/32

An Attachment to the EEM-75 Emission Electron Microscope for the Visualisation of Surfaces, Using Secondary Electron Emission

this cathode with the secondary and thermionic emission images combined. There are 7 figures and 13 references; 9 of the references are Soviet, 1 French and 3 German.

ASSOCIATION: Fizicheskiy fakul'tet MGU (Dept. of Physics, Moscow State University)

SUBMITTED: October 10, 1957.

Card 3/3

Letisov, P.V.

AUTHORS:

Milyutin, V.I., Fetisov, D.V., Raspletin, K.K.,

32-1-38/55

Spektor, F.U., Pochtarev, B.I.

TITLE:

Simplified Electrostatic Electron Microscope (Uproshchenyy elektrostaticheskiy elektronnyy mikroskop).

and the same of th

PERIODICAL:

Zavodskaya Laboratoriya, 1958, Vol. 24, Nr 1, pp. 92-96 (USSR)

ABSTRACT:

In this paper the model of the simplified electrostatic microscope for 45 kV (M3(M-45)) is described. The apparatus consists of two separate parts: the microscope proper with feeding device (700x500x1400 mm) and the vacuum apparatus (700x400x1150 mm). The efficiency of the apparatus amounts to 50-60 Å, while 1500 to 8000-fold electron-optical enlargement is attained in four steps by the potential modification of an intermediary lens. The field of observation has a diameter of 62 mm. The apparatus makes it possible to deal with 5 samples, one after the other, and to take 10 photographs (including stereophotographs), without hereby disturbing the vacuum. By means of this microscope it is also possible to take diffraction—and emission pictures of heated objects. In this case the cathode is replaced by the sample, and another anode

Card 1/2

Simplified Electrostatic Electron Microscope

32-1-38/55

is fitted. In the case of the diffraction picture, a number of lenses is taken out. In the vacuum plant the diffusion pump "MM-40-A" and the pre-vacuum pump "BH-461" are fitted. The same device can also be used as a vacuum atomizer, for which purpose it is fitted out with various additional devices. The feeding device of the microscope consists of: 1 rectifier for 50 kV, a device for regulating cathode heating, a voltage regulator, a control board for the microscope and the vacuum plant as well as of the additional devices. (The following additional devices are mentioned: a "Tesla" transformer, a voltage stabilizer, etc.). There are 6 figures and 1 Slavic reference.

AVAILABLE:

Library of Congress

Card 2/2

1. Electrostatic microscope-Nomenclature

sov/48-23-4-5/21 Wilyutin, V.I., Fetisov, D.V., Raspletin, K.K., Spektor, F.U., Pochtarev, B.I. AUTHORS ⊱ Small-sized Electrostatic Microscopes (Malogabaritnyya elektrostaticheskiye mikroskopy) TITLE: Izvestiya Akademii nauk SSSR. Sariya fizicheskaya, 1959, Vol 23, Nr 4, pp 454 - 458 (USSR) PERIODICAL: First, mention is made of the electron microscopes produced industrially (EM-3, UEM-100) and the fact is pointed out ABSTRACT: that simpler and cheaper electrostatic microscopes suffice for a great part of operations. Some small-sized electrostatic microscopes have been developed. Figure 1 shows a 40 kv electrostatic table electron microscope with a 1200-5600fold magnification range and a resolving power of up to 50 %. Next, a description is given of the instrument MESH-45, which is being considered for industrial production. The instrument consists of two units; microscope with source of current and vacuum system. The three-part electron accelerator is described, followed by the microscope slide and the lens system. Camera with fluorescence screen and plateholder and ocular tube, which features a 5fold optical magnification, are fitted Card 1/2

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R000412920015-7"

Small-sized Electrostatic Microscopes

SOV/48-23-4-5/21

under the lens block. The vacuum system consists of the mechanical pump VN-461 and the diffusion pump MM-40-A. The diagram of the current source of the instrument is shown in figure 5. At a maximum load of 100 MA the current fluctuation amounts to 0.005%. Finally, the mechanical construction and applicability are described. There are 5 figures and 2 Soviet references.

Card 2/2

SOV/48-23-4-6/21 Kabanov, A.N., Hilyntin, V.I., AUTHORS: Fetisov, D.V. Electrostatic Analyzer of Electron Velocities up to 75 kv TITLE: (Elektrostaticheskiy analizator skorostey elektronov na 75 kV) Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, 1959. PERIODICAL: Vol 23, Nr 4, pp 459 - 461 (USSR) The further development of electron microscopy requires a ABSTRACT: study of electron scattering in electron microscopic objects. Such an investigation is carried out with the aid of instruments that make it possible to determine the angle and electron energy distribution upon acting the object. The instruments hitherto employed featured electrostatic lenses and an accelerating voltage of 35-40 kv. A description is given of the difficulties arising in the adequate application of accelerating voltages up to 75 kv. Figure 1 shows the analyzer principle for a 75 kv electron beam, and figure 2 the characteristic curve and geometrical dimensions of the analyzer. In principle, the deflection of an incident beam Card 1/2 into an electric field with known strength, and the beam

Electrostatic Analyzer of Electron Velocities SOV/48-23-4-6/21 up to 75 kv

intensity are measured with this instrument. Figure 3 shows a basic circuit diagram of the instrument. Finally, the adjustment ranges of the middle electrode potential are specified. A detailed description of the instrument will be given in a following paper. There are 3 figures.

Card 2/2

THE PROPERTY HEREAL REPORT OF THE PROPERTY OF

	्रुरिष्ट्रावस्यः	Pochtarev, B. I., Raspletin, K. K., SCV/47-83-4-7/21 Fetisov, D. V.
• 	TITLE:	An Instrument for the Measurement of the Receiving Power and the Light Output of Fluorescing Sergens (PRS) Pribor dlya izmereniya razreshayushcheyy sposobnosti i svotootleebi fluorestsiruyushchikh ekranov (PRS)
	PERIODICAL:	Izvestiya Akademii nauk SSSR. Seriya fizicheskeya, 1989, Vol 23, Nr 4, pp 462-466 (USSR)
	ABSTRACT:	The main characteristic feature of technical cathodoluminophores is their resolving power. This is determined by measuring the minimum distance, at which two lines projected on the serson may still be visible as separated from each other. The knowledge of the light output is equally important when measuring the intensity of a beam. In this connection, the spectral distribution of light intensity is of great interest. The instrument Min was developed to serve for the determination of the resolving nower of the light output, and of the spectral intensity distribution. It works with 5-30 ky accelerating voltage. The
	0erd 1/2	instrument makes it possible to investigate the resolving .